

CLAIMS

WHAT IS CLAIMED IS:

1. A method for configuring an electronically steerable beam of a traffic signal light, comprising:
 - receiving at least one command to change a viewing angle of a traffic signal light;
 - translating the command to a power line command;
 - sending the power line command to the traffic signal light, wherein the power line command effects an electronic steerable beam of the traffic signal light; and
 - adjusting a viewing angle of at least a portion of the traffic signal light based on the power line command.
2. The method of claim 1 further comprising storing the viewing angle.
3. The method of claim 1 further comprising interactively adjusting the viewing angle.
4. The method of claim 1 further comprising dynamically adjusting the viewing angle.
5. The method of claim 1 further comprising adjusting the viewing angle based on a vantage point of a vehicle at a location proximate the traffic signal light.
6. The method of claim 1 further comprising encrypting at least one of a following command from a group consisting of:
 - the at least one command; and
 - the power line command.

7. The method of claim 1, wherein the command is received in at least one of a following manner from a group consisting of:

- a wireless connection;
- a wired connection; and
- a combination wireless and wired connection.

8. The method of claim 1, wherein the power line command is sent in at least one of a following manner from a group consisting of:

- a wireless connection;
- a wired connection; and
- a combination wireless and wired connection.

9. A computer readable medium comprising instructions for:
receiving a command to change a viewing angle of at least one traffic signal light;
wherein a Light Emitting Diode of the traffic signal light comprises an array of columns and rows;

performing at least one of a following action, based on the command, from a group consisting of:

- turning at least one of the columns on;
- turning at least one of the columns off;
- turning at least one of the rows on; and
- turning at least one of the rows off; and

changing the viewing angle based on the performed action.

10. The computer readable medium of claim 9 further comprising increasing the viewing angle by performing at least one of the following actions from a group consisting of:

- turning the at least one of the columns on;
- turning a portion of the at least one of the columns on;
- turning the at least one of the rows on; and
- turning a portion of the at least one of the rows on.

11. The computer readable medium of claim 9 further comprising decreasing the viewing angle by performing at least one of the following actions from a group consisting of:

- turning the at least one of the columns off;
- turning a portion of the at least one of the columns off;
- turning the at least one of the rows off; and
- turning a portion of the at least one of the rows off.

12. The computer readable medium of claim 9 further comprising increasing the viewing angle by turning the at least one of the columns on situated to a side of a current on column from a group consisting of:

- a left side; and
- a right side.

13. The computer readable medium of claim 9 further comprising increasing the viewing angle by turning the at least one of the columns on situated to a side of a current off column from a group consisting of:

- a left side; and
- a right side.

14. The computer readable medium of claim 9 further comprising decreasing the viewing angle by turning the at least one of the columns off situated to a side of a current on column from a group consisting of:

- a left side; and
- a right side.

15. The computer readable medium of claim 9 further comprising decreasing the viewing angle by turning the at least one of the columns off situated to a side of a current off column from a group consisting of:

- a left side; and
- a right side.

16. The computer readable medium of claim 9 further comprising increasing the viewing angle by turning the at least one of the rows on situated to a side of a current on row from a group consisting of:

- a top side; and
- a bottom side.

17. The computer readable medium of claim 9 further comprising decreasing the viewing angle by turning the at least one of the rows on situated to a side of a current off row from a group consisting of:

- a top side; and
- a bottom side.

18. The computer readable medium of claim 9 further comprising increasing the viewing angle by turning the at least one of the rows off situated to a side of a current on row from a group consisting of:

- a top side; and
- a bottom side.

19. The computer readable medium of claim 9 further comprising decreasing the viewing angle by turning the at least one of the rows off situated to a side of a current off row from a group consisting of:

- a top side; and
- a bottom side.

20. The computer readable medium of claim 9 further comprising changing an electronically steerable beam of the traffic signal light based on the changed viewing angle.

21. The computer readable medium of claim 9 further comprising independently performing the at least one of the following action.

22. The computer readable medium of claim 9 further comprising contemporaneously performing the at least one of the following action.

23. A method for configuring an electronically steerable beam of a traffic signal light, comprising:

selecting a vantage point for beam steering;
adjusting at least one of a following viewing perspective of the traffic signal light from a group consisting of:

a horizontal viewing angle;
a horizontal viewing width;
a vertical viewing angle; and
a vertical viewing width; and

setting the adjusted at least one of the viewing perspectives.

24. The method of claim 23 further comprising adjusting the viewing perspectives by performing at least one of a following action from a group consisting of:

widening the horizontal viewing angle;
narrowing the horizontal viewing angle;
widening the horizontal viewing width; and
narrowing the horizontal viewing width.

25. The method of claim 23 further comprising adjusting the viewing perspectives by performing at least one of a following action from a group consisting of:

widening the vertical viewing angle;
narrowing the vertical viewing angle;
widening the vertical viewing width; and
narrowing the vertical viewing width.

26. The method of claim 24 further comprising performing the narrowing by reducing at least one column associated with the traffic signal light.

27. The method of claim 24 further comprising performing the widening by increasing at least one column associated with the traffic signal light.

28. The method of claim 25 further comprising performing the narrowing by reducing at least one row associated with the traffic signal light.

29. The method of claim 25 further comprising performing the widening by increasing at least one row associated with the traffic signal light.

30. The method of claim 24 further comprising performing the narrowing by reducing at least a portion of at least one column associated with the traffic signal light.

31. The method of claim 24 further comprising performing the widening by increasing at least a portion of at least one column associated with the traffic signal light.

32. The method of claim 25 further comprising performing the narrowing by reducing at least a portion of at least one row associated with the traffic signal light.

33. The method of claim 25 further comprising performing the widening by increasing at least a portion of at least one row associated with the traffic signal light.

34. A system for configuring an electronically steerable beam of a traffic signal light, comprising:

- a wireless device adapted to send at least one command to change a viewing angle of a traffic signal light;
- a control unit adapted to receive the command;
- the control unit further adapted to:
 - translate the command to a power line command;
 - send the power line command to the traffic signal light, wherein the power line command effects an electronic steerable beam of the traffic signal light; and
 - adjust a viewing angle of at least a portion of the traffic signal light based on the power line command.

35. A system for configuring an electronically steerable beam of a traffic signal light, comprising:

a wireless device adapted to send at least one command to change a viewing angle of a traffic signal light; and

a control unit adapted to receive the command;

the control unit further adapted to send the command to the traffic signal light, wherein the command adjusts a viewing angle of at least a portion of the traffic signal light.

36. The system of claim 35, wherein the control unit is internally coupled to the traffic signal light.

37. The system of claim 35, wherein the control unit is externally coupled to the traffic signal light.

38. The system of claim 35, wherein the control unit is internally coupled to the wireless device.

39. The system of claim 35, wherein the control unit is externally coupled to the wireless device.

40. The system of claim 35, wherein the control unit is coupled to at least one Light Emitting Diode array of the traffic signal light.

41. The system of claim 35 further comprising receiving the at least one command by the wireless device.

42. The system of claim 41, wherein the received command is a voice command.

43. The system of claim 42, wherein the received command is received by a depressing of a portion of the wireless device, wherein the portion is at least one of a following portion from a group consisting of:

a touchscreen;
arrow keys; and
a combination of a touch screen and arrow keys.

44. An electronic device, comprising:

means for receiving at least one command to change a viewing angle of a traffic signal light;

means for translating the command to a power line command;

means for sending the power line command to the traffic signal light, wherein the power line command effects an electronically steerable beam of the traffic signal light; and

means for adjust a viewing angle of at least a portion of the traffic signal light based on the power line command.

45. A wireless device adapted to configure an electronically steerable beam of a traffic signal light to a desirable viewing angle and viewing width, wherein the traffic signal light comprises an array of columns and rows consisting of light emitting diodes, comprising:

means for performing at least one of a following action from a group consisting of:

shift left;

shift right;

all columns on;

all columns off;

all rows on;

all rows off;

increase horizontal viewing angle;

decrease horizontal viewing angle;

shift up;

shift down;

increase vertical viewing angle; and

decrease vertical viewing angle.

46. A device comprising a graphical user interface adapted to configure an electronically steerable beam of a traffic signal light in order to alter a viewing angle of the traffic signal light, the traffic light signal including a Light Emitting Diode consisting of an array of columns and rows, the device comprising:

- means for selecting at least a portion of at least one of the columns;
- means for deselecting at least a portion of at least one of the columns;
- means for turning on at least a portion of at least one of the columns;
- means for turning off at least a portion of at least one of the columns;
- means for selecting at least a portion of at least one of the rows;
- means for deselecting at least a portion of at least one of the rows;
- means for turning on at least a portion of at least one of the rows; and
- means for turning off at least a portion of at least one of the rows.